Research Methods for Business Students

Chapter 10

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Learning points

- Understand the advantages and disadvantages of questionnaires as a data collection method.
- Be aware of a range of self-administered and interviewer-administered questionnaires.
- Be aware of the possible need to combine techniques within a research project.
- Be able to select and justify the use of appropriate questionnaire techniques for a variety of research scenarios.
- Be able to design, pilot and administer a questionnaire to answer research questions and to meet objectives.
- Be able to take appropriate action to enhance response rates and to ensure the validity and reliability of the data collected.
- Be able to apply the knowledge, skills and understanding gained to your own research project.
10.1 Introduction

- The greatest use of questionnaires is made by the survey strategy. However, both experiment and case study research strategies can make use of these techniques.
- Questionnaire is a general term to include all techniques of data collection in which each person is asked to respond to the same set of questions in a predetermined order.
10.1 Introduction

- Response rate, validity and reliability can be maximized by:
  - Careful design of individual questions.
  - Clear layout of the questionnaire form.
  - Lucid explanation of the purpose of the questionnaire.
  - Pilot testing.
  - Carefully planned and executed administration.
10.2 An overview of questionnaire techniques

- When to use questionnaire
  - Questionnaires can be used for descriptive or explanatory research.
  - Descriptive research will enable you to identify and describe the variability in different phenomena.
  - Explanatory or analytical research will enable you to examine and explain relationships between variables, in particular cause-and-effect relationships.
10.2 An overview of questionnaire techniques

- Type of questionnaire
  - See figure 10.1 in page 282
10.2 An overview of questionnaire techniques

- The choice of questionnaire
  - Characteristics of the respondents from whom you wish to collect data.
  - Importance of reaching a particular person as respondent.
  - Importance of respondents’ answers not being contaminated or distorted.
  - Size of sample you require for your analysis, taking into account the likely response rate.
  - Types of question you need to ask to collect your data.
  - Number of questions you need to ask to collect your data.
10.2 An overview of questionnaire techniques

- The choice of questionnaire
  - The type of questionnaire you choose will dictate how sure you can be that the respondent is the person whom you wish to answer the questions and thus the reliability of responses.
  - Any contamination of respondents’ answers will reduce your data’s reliability.
  - The type of questionnaire you choose will affect the number of people who respond.
  - Longer questionnaires are best presented as a structured interview.
10.2 An overview of questionnaire techniques

- The choice of questionnaire
  - Your choice of questionnaire will also be affected by the resources you have available.
  - The time needed for data collection increases markedly for delivery and collection questionnaires and structured interviews where the samples are geographically dispersed. Unless your questionnaire is administered online, or computer-aided personal interviewing or computer-aided telephone interviewing are used, you will need to consider the costs of reproducing the questionnaire, clerical support and entering the data form computer analysis.
10.3 Deciding what data need to be collected

- Research design requirements
  - The questions you ask in questionnaires need to be defined precisely prior to data collection. The questionnaire offers only one chance to collect the data.
  - For most management and business research, the data you collect using questionnaires will be used for either descriptive or explanatory purposes.
  - For research involving organizations, we have found it essential to understand the organizations in which we are undertaking the research.
10.3 Deciding what data need to be collected

- Research design requirements
  - The relationships between variables:
    - Variables are *dependent* – that is, change in response to changes in other variables.
    - Variables are *independent* – that is, cause changes in dependent variables.
    - Variables are *extraneous* – that is, Might also cause changes in dependent variables, thereby providing an alternative explanation to your independent variables.
10.3 Deciding what data need to be collected

- Types of variable
  - Opinion
  - Behavior
  - Attribute
10.3 Deciding what data need to be collected

- Ensuring that essential data are collected
  - Decide whether the main outcome of your research is descriptive or explanatory.
  - Subdivide each research question or objective into more specific investigative questions about which you need to gather data.
  - Repeat the second stage if you feel that the investigative questions are not sufficiently precise.
  - Identify the variables about which you will need to collect data to answer each investigative question.
  - Establish how to measure the data for each variable.
10.4 Designing the questionnaire

- Designing individual questions
  - Adopt questions used in other questionnaires.
  - Adapt questions used in other questionnaires.
  - Develop their own questions.

- See figure 10.2 in page 292
10.4 Designing the questionnaire

- Six types of closed question:
  - List
  - Category
  - Ranking
  - Scale or rating
  - Quantity
  - Grid
10.4 Designing the questionnaire

- Question wording
  - Checklist for question wording
    - See box 10.1 in page 299
10.4 Designing the questionnaire

- Translate questions into other languages
  - Lexical meaning
  - Idiomatic meaning
  - Grammar and syntax
  - Experiential meaning
10.4 Designing the questionnaire

- **Question coding**
  - If you are planning to analyze your data by computer, they will need to be coded prior to entry.
  - For quantity questions, actual numbers can be used as codes. For other questions, you will need to design a coding scheme.
  - If you are considering administering your questionnaire online, you can create an online form containing text boxes, check boxes and drop-down list boxes.
10.4 Designing the questionnaire

- Designing the survey form
  - These should be logical to the respondent (and interviewer) rather than follow the order in your data requirements table.

- Checklist for question order
  - See box 10.2 in page 303
10.4 Designing the questionnaire

- The layout of the questionnaire
  - Layout is important for both self-administered and interviewer-administered questionnaires.
    - Do not make the questionnaire longer than really necessary to meet your research questions and objectives.
    - Do not be too obsessed with the length of your questionnaire.
  - Checklist for questionnaire layout
    - See box 10.3 in page 305
10.4 Designing the questionnaire

- Explaining the purpose of the questionnaire
  - The covering letter
    - Most self-administered questionnaires are accompanied by a covering letter, which explains the purpose of the survey.
    - Structure of a covering letter
      - See box 10.4 in page 306
10.4 Designing the questionnaire

- Explaining the purpose of the questionnaire
  - Introducing the questionnaire
    - Clear unbiased title, which conveys the topic of the questionnaire and makes it sound interesting.
    - Subtitle, which conveys the research nature of the topic.
    - Neutral graphic illustration or logo to add interest and to set the questionnaire apart (self-administered questionnaires).
10.4 Designing the questionnaire

- Explaining the purpose of the questionnaire
  - Closing the questionnaire
    - At the end of your questionnaire you need to explain clearly what you want the respondent to do with their completed questionnaire. It is usual to start this section by thanking her or him for completing the questionnaire, and by providing a contact name and telephone number for any queries she or he may have. You should then give details of the data by which you would like the questionnaire returned and how and where to return it.
10.4 Designing the questionnaire

- Pilot testing and assessing validity
  - Prior to using your questionnaire to collect data it should be pilot tested. The purpose of the pilot test is to refine the questionnaire so that respondents will have no problems in answering the questions and there will be no problems in recording the data. And it will enable you to obtain some assessment of the questions’ validity and the likely reliability of the data that will be collected.
10.4 Designing the questionnaire

- Pilot testing and assessing validity
  - Pilot testing can provide:
    - How long the questionnaire took to complete.
    - The clarity of instructions.
    - Which, if any, questions were unclear or ambiguous.
    - Which, if any, questions the respondent felt uneasy about answering.
    - Whether in their opinion there were any topic omissions.
    - Whether the layout were clear and attractive.
    - Any other comments.
10.4 Designing the questionnaire

- Testing for reliability
  - Test re-tests
  - Internal consistency
  - Alternative form
10.5 Administering the questionnaire

- On-line questionnaires
  - Via email
    - 5 stages, see page 311
  - Via a website
    - 4 stages, see page 312
10.5 Administering the questionnaire

- Postal questionnaires
  - 6 stages, see pp312-313

- Delivery and collection questionnaires
  - 5 stages, see page 314
10.5 Administering the questionnaire

- Telephone questionnaires
  - 5 stages, see pp314-315

- Structured interviews
  - 6 stages, see page 315
10.6 Summary

- Questionnaires collect data by asking people to respond to exactly the same set of questions.
- Your choice of questionnaire will be influenced by your research question and objectives and the resources that you have available. The five main types are on-line, postal, delivery and collection, telephone, and interview schedule.
- Prior to designing a questionnaire, you must know precisely what data you need to collect to answer your research question and to meet your objectives.
10.6 Summary

- The validity and reliability of the data you collect and the response rate you achieve depend largely on the design of your questions, the structure of your questionnaire, and the rigour of your pilot testing.
- When designing your questionnaire you should consider the wording of individual questions prior to the order in which they appear. Questions can be divided into open and closed. The six types of closed questions are list, category, ranking, rating (scale), quantity and grid.
10.6 Summary

- Wherever possible closed questions should be pre-coded on your questionnaire to facilitate analysis.
- The order and flow of questions in the questionnaire should be logical to the respondent. This can be assisted by filter questions and linking phrases.
- The questionnaire should be laid out so that it is easy to read and the responses are easy to fill in.
10.6 Summary

- Questionnaires must be introduced carefully to the respondent to ensure a high response rate. For self-administered questionnaires this should take the form of a covering letter; for interviewer-administered questions it will be done by the interviewer.
- All questionnaires should be pilot tested prior to collecting data to assess the validity and likely reliability of the questions.
- Administration of questionnaires needs to be appropriate to the type of questionnaire.
The End
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THANK YOU!

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